Reply to Office Action of October 6, 2003

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for processing authentication failed/authorization denied subscribers by an intelligent network, comprising:

detecting an authentication failure or authorization denial for a subscriber who has originated a call and informing a service control point (SCP) of the failure or denial;

instructing by the SCP that the call originated by the subscriber be connected to a prescribed location; and

inducing the subscriber to normal service according to the instruction of the SCP.

2. (Original) The method of claim 1, wherein the step of inducing the subscriber to normal service comprises:

collecting information on the call for which authentication has failed or authorization has been denied;

analyzing the collected information; and selecting a route to set up a call according to the analyzed information.

3. (Original) The method of claim 1, wherein the detection is performed by an

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Origination_Attempt_Unauthorized detection point.

4. (Original) The method of claim 3, wherein the

Origination_Attempt_Unauthorized detection point comprises an authorization failure trigger configured to indicate a state of the authentication failure or the authorization denial, and wherein the state determines whether the SCP is informed of the authentication failure or authorization denial when the subscriber who attempted the call was authentication-failed or authorization-denied.

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- 5. (Original) The method of claim 4, wherein the SCP is informed of the authentication failure or authorization denial when the authorization failure trigger is in an activated state.
- 6. (Original) A method for processing authorization failed/authorization denied subscribers by an intelligent network, comprising:

analyzing an authentication and authorization of a subscriber originating a call when the call is detected by a mobile switching system;

determining whether an authorization denial trigger is in a state of activation if the subscriber is authorization-denied;

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transmitting a voice announcement provided by a switching system and releasing the

call if the authorization denial trigger is in a non-activated state, or transmitting an origination

request instruction message including a parameter indicating a reason for the authentication

failure or the authorization denial against the subscriber and location information of the

subscriber, to an SCP if the authorization denial trigger is in an activated state;

transmitting a response message to the switching system to connect the call originated

by the subscriber to a prescribed location according to an analysis of the origination request

instructing message; and

connecting the call originated by the subscriber to a prescribed location according to

the response message.

7. (Original) The method claim 6, wherein the origination request instruction

message comprises an OriginationRequest INVOKE message in an intelligent network of a

North American wireless standard.

8. (Original) The method of claim 6, wherein the origination request instruction

message comprises an Initial Detection Point message in an ITU or a Global System for

Mobile/Universal Mobile Telecommunications System (GSM/UMTS).

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- 9. (Original) The method of claim 6, wherein the response message comprises an OriginationRequest RETURN RESULT message to connect the call originated by the subscriber to a prescribed location in an intelligent network of a North American wireless standard.
- 10. (Original) The method of claim 6, wherein the response message comprises a Connection message to connect the call originated by the subscriber to a prescribed location in an intelligent network of an ITU or a Global System for Mobile/Universal Mobile Telecommunications.
- 11. (Original) The method of claim 6, wherein when the response message transmitted from the SCP comprises one of (A) a routing number to route to an operator of a service center that handles authentication failure or authorization denial and (B) information corresponding to a phone number assigned by a legitimate subscriber of a corresponding terminal, then the switching system connects the originated call with a corresponding one of a service center and a designated subscriber.
- 12. (Original) The method of claim 6, wherein when the response message transmitted from the SCP comprises information to transmit an announcement with a special

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purpose, the switching system establishes an originated call with an Intelligent Peripheral assigned in a routing number.

13. (Original) The method of claim 6, wherein the switching system establishes the originated call with a receiving subscriber when the response message transmitted from the SCP comprises an instruction to perform a normal call.

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- 14. (Original) The method of claim 6, wherein when a routing number of an Intelligent Peripheral (IP) that provides a prescribed announcement and service has not been assigned in the SCP, the SCP transmits a seize resource message to the IP.
- 15. (Original) The method of claim 14, wherein the seize resource message comprises a parameter for the prescribed announcement and service, and wherein the seize resource message causes the SCP to be assigned a resource to access the corresponding announcement and the special service from the IP.
- 16. (Original) A method for processing authentication failed/authorization denied subscribers by intelligent network, comprising:

determining whether an authorization failure trigger for a corresponding subscriber is

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in an activated state, when an authentication failure or an authorization denial is detected for the subscriber who has originated a call;

sending an origination request to a Service Central Point (SCP) that which handles the corresponding trigger, when the authorization failure trigger is in an activated state;

analyzing the origination request and transmitting a response message to a switching system to connect the call originated by the subscriber to a prescribed location according to the result of the analysis; and

connecting the originated call to the prescribed location according to the response message.

- 17. (Original) The method of claim 16, further comprising transmitting a voice announcement provided by the switching system and releasing the originated call, when the authorization failure trigger is in a non-activated state.
- 18. (Original) The method of claim 16, wherein a reason for the authentication failure and the authorization denial included in the origination request, a location information, and a service profile for the subscriber are considered in the analysis of the origination request.

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- 19. (Original) The method of claim 16, wherein, the response message comprises one of (A) a routing number to an operator of a service center that handles the authentication failure or authorization denial and (B) information on a phone number designated by a legitimate subscriber of a corresponding terminal.
- 20. (Original) The method of claim 19, wherein the response message comprises the routing number to the operator of the service center that handles the authentication failure or authorization denial when the analysis of the origination request indicates that the SCP is to connect the originated call to the service center, and wherein the response message comprises information on a phone number designated by a legitimate subscriber of a corresponding terminal when the SCP is to connect to a phone number designated by the legitimate subscriber of the corresponding terminal.
- 21. (Original) The method of claim 16, wherein the response message comprises a routing number when the SCP is to transmit a voice announcement having a special purpose, if the routing number to be routed to an Intelligent Peripheral transmitting the voice announcement has been assigned.

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22. (Original) The method of claim 21, wherein the analysis of the origination request determines whether the SCP is to transmit the voice announcement.

23. (New) A method comprising:

determining if a call to a first destination is unauthorized;

if the call is not authorized, then forwarding the call to a second destination to provide an option to gain authorization to call the first destination.

- 24. (New) The method of claim 23, wherein said forwarding is performed according to an instruction of a service control point.
- 25. (New) The method of claim 23, wherein the results of said determining are forwarded to a service control point for analysis.
- 26. (New) the method of claim 23, wherein the method is implemented in a wireless communication system.
- 27. (New) The method of claim 26, where in the method is implemented in an intelligent network.

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28. (New) The method of claim 23, wherein the option to gain authorization is inducing a caller of the call to pay a past due invoice.

29. (New) An apparatus configured to:

determine if a call to a first destination is unauthorized;

if the call is not authorized, then forward the call to a second destination to provide an option to gain authorization to call the first destination.

- 30. (New) The apparatus of claim 29, wherein forwarding the call is performed according to an instruction of a service control point.
- 31. (New) The apparatus of claim 29, wherein the results of determining if the call to the first destination is authorized are forwarded to a service control point for analysis.
- 32. (New) The apparatus of claim 29, wherein the apparatus is comprised in a wireless communication system.

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33. (New) The apparatus of claim 32, wherein the apparatus is comprised in an intelligent network.

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34. (New) The apparatus of claim 29, wherein the option to gain authorization is inducing a caller of the call to pay a past due invoice.

35. (New) An apparatus comprising:

communication equipment; and

a means for inducing a caller to pay a service fee for use of the communication equipment.